

AUDIO TOOLS FOR ESL



An Open Source
Tool for
Recording
Editing
&
Exporting
MP3 Files

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How to create mp3 voice recordings with this free, open source, audio tool.

DOWNLOADING AUDACITY:

Audacity is freely available from the Audacity Web site: <http://audacity.sourceforge.net/>

Versions are available for both Windows and Mac OS X.

Steps:

1. Click the link to download Audacity to your computer.
2. Windows users double click the setup icon to run the installer program; Mac users will open up the .dmg image file and copy the audacity items to a new folder in their applications folder.

You will also need to download and install a separate file for encoding mp3 files. The following is from the user documentation on the Audacity Web site:

“Audacity cannot encode MP3 files by itself, because the MP3 encoding algorithm is patented and cannot legally be used in free programs. However, Audacity has been programmed to recognize other existing MP3 encoders that you can download separately. All you have to do is obtain the appropriate MP3 encoder for your computer and then show Audacity where it is located.

If you use...

Windows

Linux/Unix

Macintosh

You need to...

Download LAME and look for the file called lame_enc.dll

Download LAME and compile it as a shared object, then look for the file called libmp3lame.so

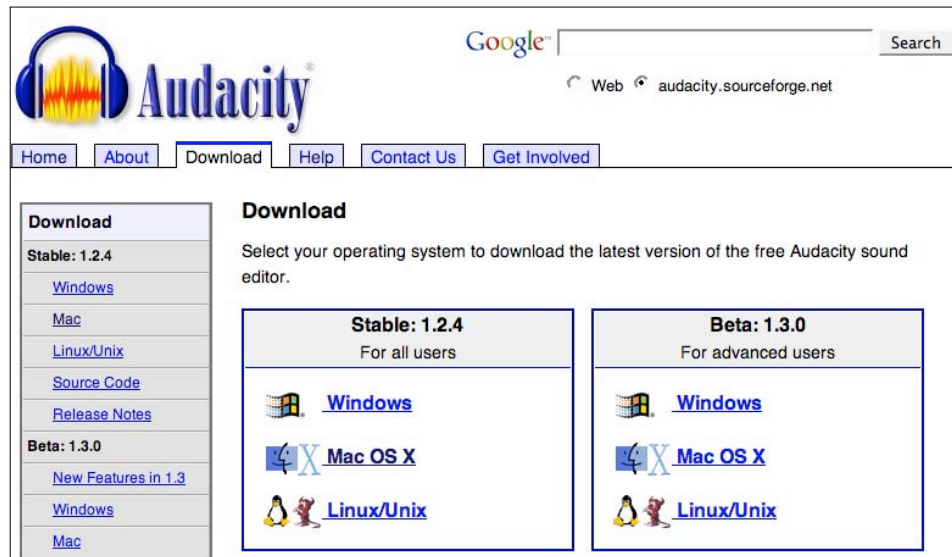
Download LAMELib (see our website for more info).

For links to these MP3 encoders, go to the Audacity web page (<http://audacity.sourceforge.net/>) and go to the page for your operating system.

The first time you try to export an MP3 file, Audacity will ask you to locate your MP3 encoder. Locate the file indicated above. From then on, Audacity will not need to ask you again and you will be able to export MP3 files easily.”

I recommend placing the LAME encoder in the Audacity folder (in Windows it will be found in the programs folder on your C: drive; Mac users look in the applications folder).

AUDACITY WEB PAGE



The screenshot shows the Audacity website's download page. At the top, there's a Google search bar and the Audacity logo. Below the logo is a navigation menu with links: Home, About, Download (selected), Help, Contact Us, and Get Involved. On the left, there's a sidebar with a 'Download' section containing links for Stable: 1.2.4 (Windows, Mac, Linux/Unix, Source Code, Release Notes) and Beta: 1.3.0 (New Features in 1.3, Windows, Mac). The main content area is titled 'Download' and instructs users to select their operating system. It features two columns: 'Stable: 1.2.4 For all users' and 'Beta: 1.3.0 For advanced users'. Each column has links for Windows, Mac OS X, and Linux/Unix, accompanied by their respective icons.

DOWNLOADING AUDACITY AND THE LAME ENCODER

How do I download and install the LAME encoder?

Because of software patents, we cannot distribute the LAME software ourselves. Follow these instructions to download the LAME encoder to export MP3 files with Audacity.

Windows

1. Go to the [LAME download page](#).
2. Click on any link from the list of identical "lame-3.96.1" links.
3. When you have finished downloading LAME, unzip it and save the file **lame_enc.dll** anywhere on your computer.
4. The first time you use the "Export as MP3" command, Audacity will ask you where lame_enc.dll is saved.

Mac OS 9 or X

1. Go to the [LAME download page](#).
2. Download the version of LameLib for your operating system.
3. When you have finished downloading, use Stuffit Expander to extract the files. (This may happen automatically.)
4. Save the file called "LameLib" anywhere on your computer.
5. The first time you use the "Export as MP3" command, Audacity will ask you where LameLib is saved.

Windows

Recommended Download

This is a Sourceforge.net download page and you will be asked before downloading to select a mirror. A "mirror" is one of a group of internet addresses hosting an identical download. If possible, simply select the one closest to your actual location. When downloading please disable any download managers you may have and left click on the link to start your Audacity download

- [Audacity 1.2.4b installer](#) (.exe file, 2.5 MB) - The latest version of the free Audacity audio editor.

Optional Downloads

- [LAME MP3 encoder](#) - Allows Audacity to export MP3 files.

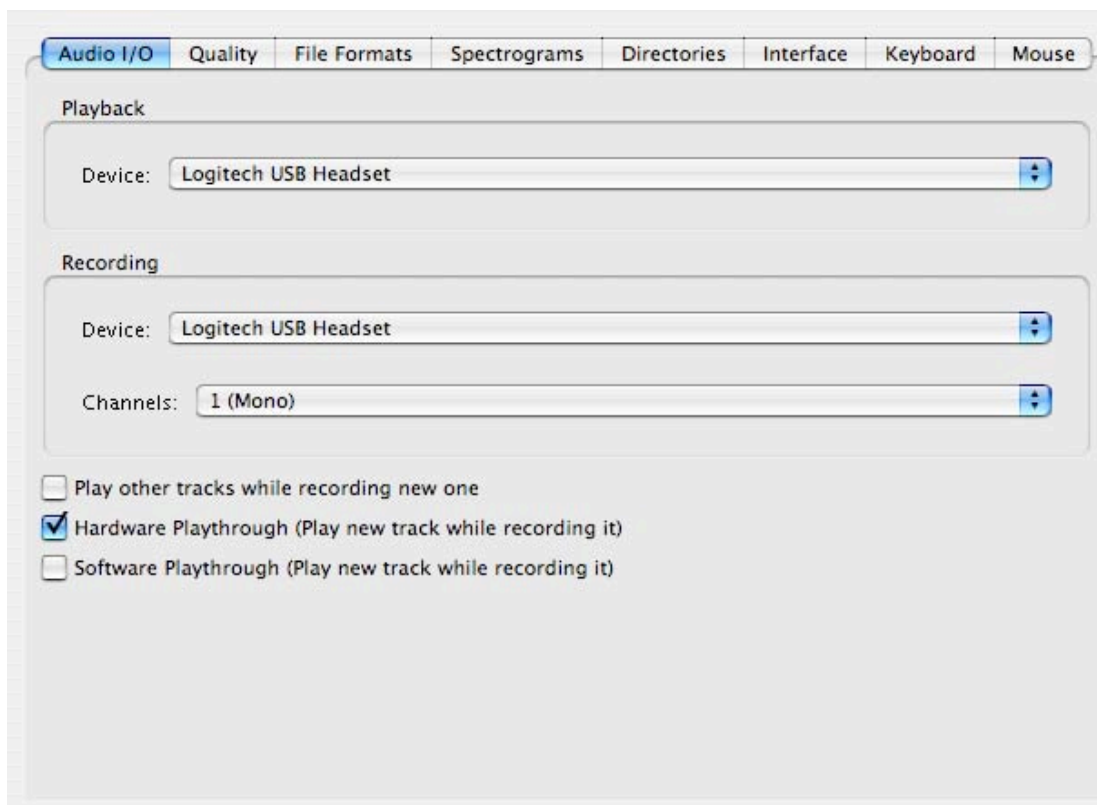
SETTING UP AUDACITY

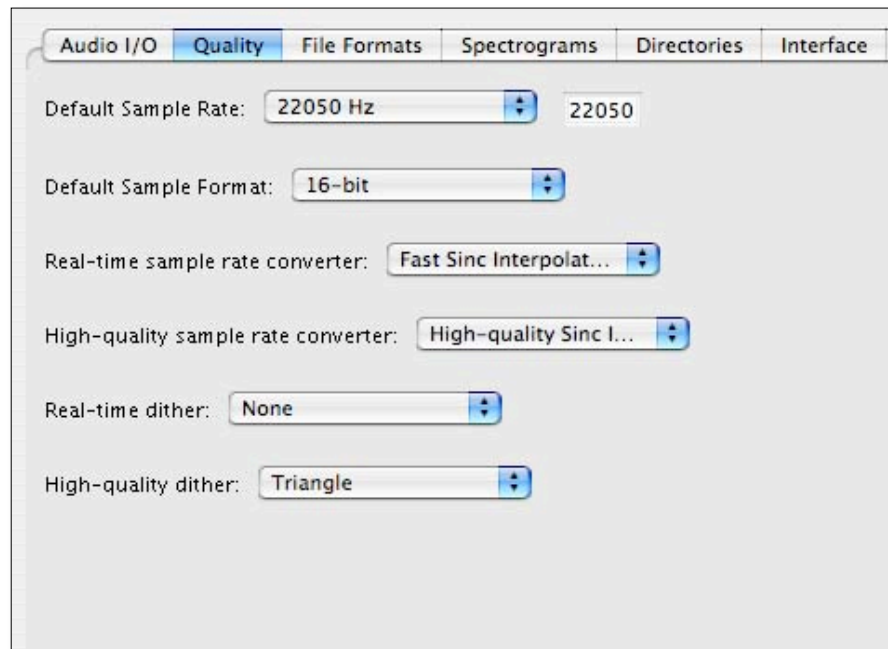
Once you have installed Audacity you can run the program for the first time and set it up for recording. If you plan to use Audacity primarily as a tool for recording voices and exporting small mp3 files, you will want to change several options.

To access the preferences dialog choose **Preferences** from the **Edit** menu (windows) or the application menu (Mac OS).

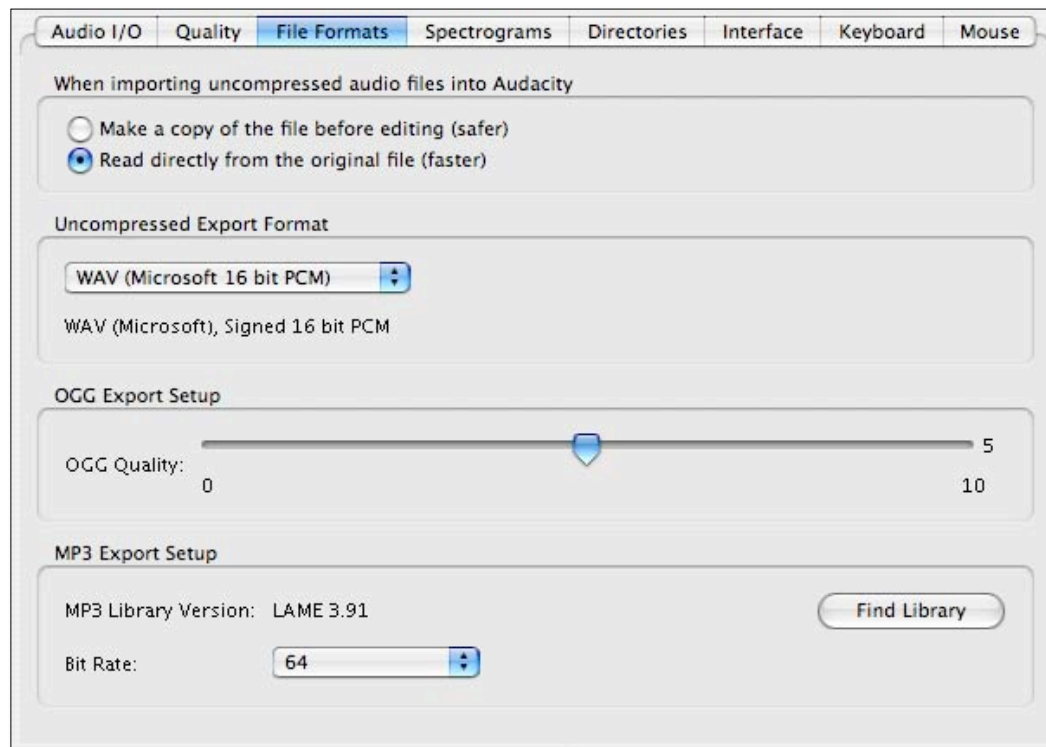
Here are the settings you will want to change: (click the buttons across the top of the page to access the various panels)

- **Audio I/O** : choose your preferred input (microphone) and output (speakers/headphones) sources. Under recording choose mono. Stereo is not necessary for most purposes and takes up twice as much file space.
- **Quality**: Set the default sample rate to 22050 Hz or less to keep file size down.
- **File Formats**: In the MP3 section, set the bit rate down to 64 or less. You can also use the Find Library button to locate the LAME encoder here.





SETTING THE QUALITY AND FILE FORMATS PREFERENCES

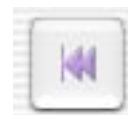
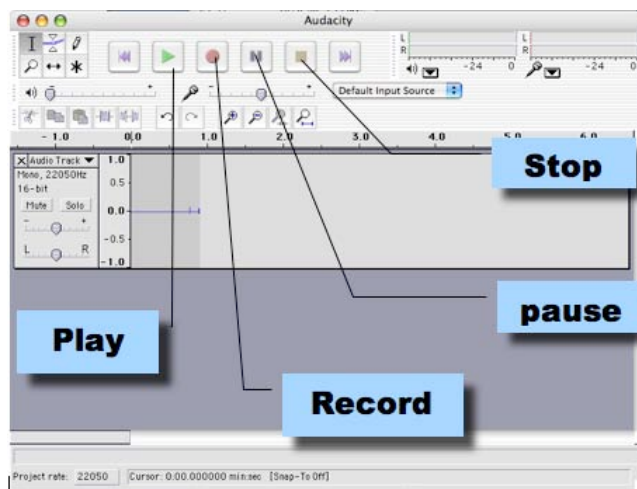


RECORDING WITH AUDACITY

Recording with Audacity is a fairly simple process. The interface resembles a traditional recorder.

To make a simple recording follow these steps:

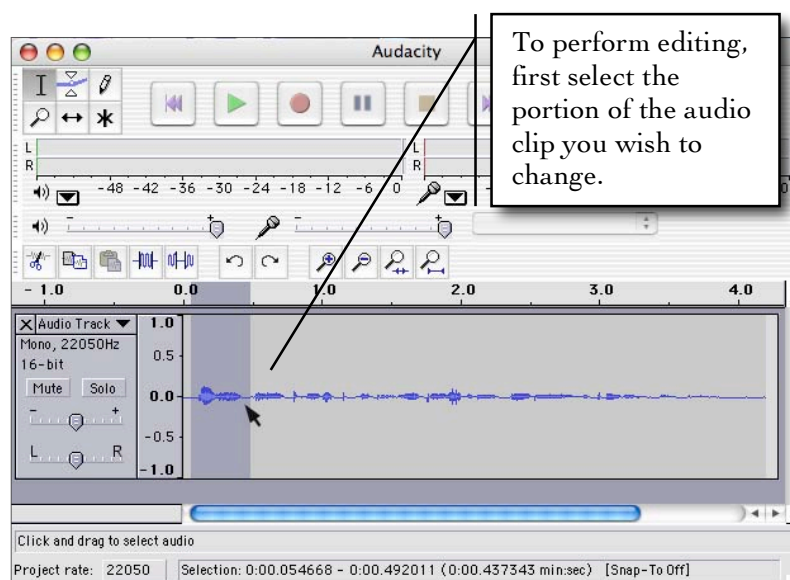
1. Click the **Record** button to begin.
2. Speak into the recorder.
3. If you need to pause before you are finished, use the **Pause** button. (If you use the stop button then click record, you will add a new track that will play at the same time as track 1). Click the **Pause** button again to resume recording.
4. Click the **Stop** button to stop recording.
5. You can rewind using the purple **Skip to Start** button.
6. Click the **Play** button to listen to your recording.



EDITING WITH AUDACITY

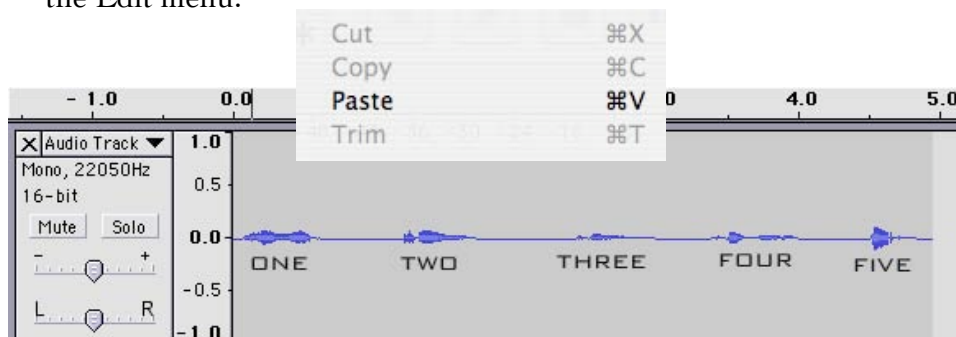
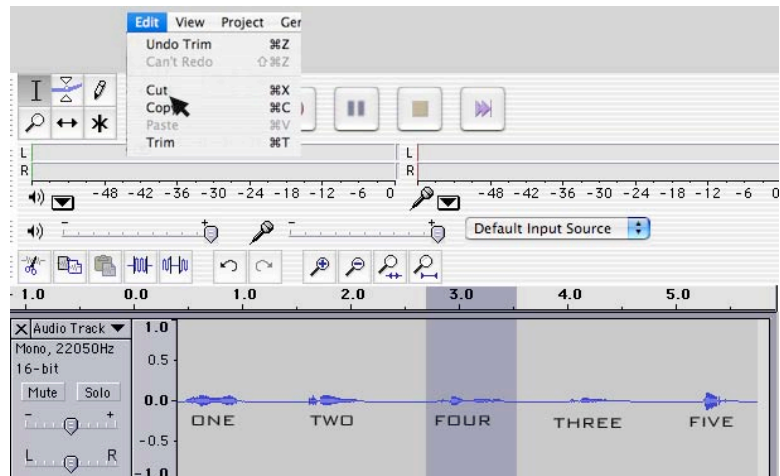
When you are through recording, you can edit your audio track. For example, you can cut out unwanted sounds such as coughs, misspoken words, etc. You can also use the cut and paste function to re-order parts of a clip.

To perform editing functions, first select a portion of the audio clip, and then choose cut, copy or delete.



HOW TO COPY AND PASTE PART OF A CLIP:

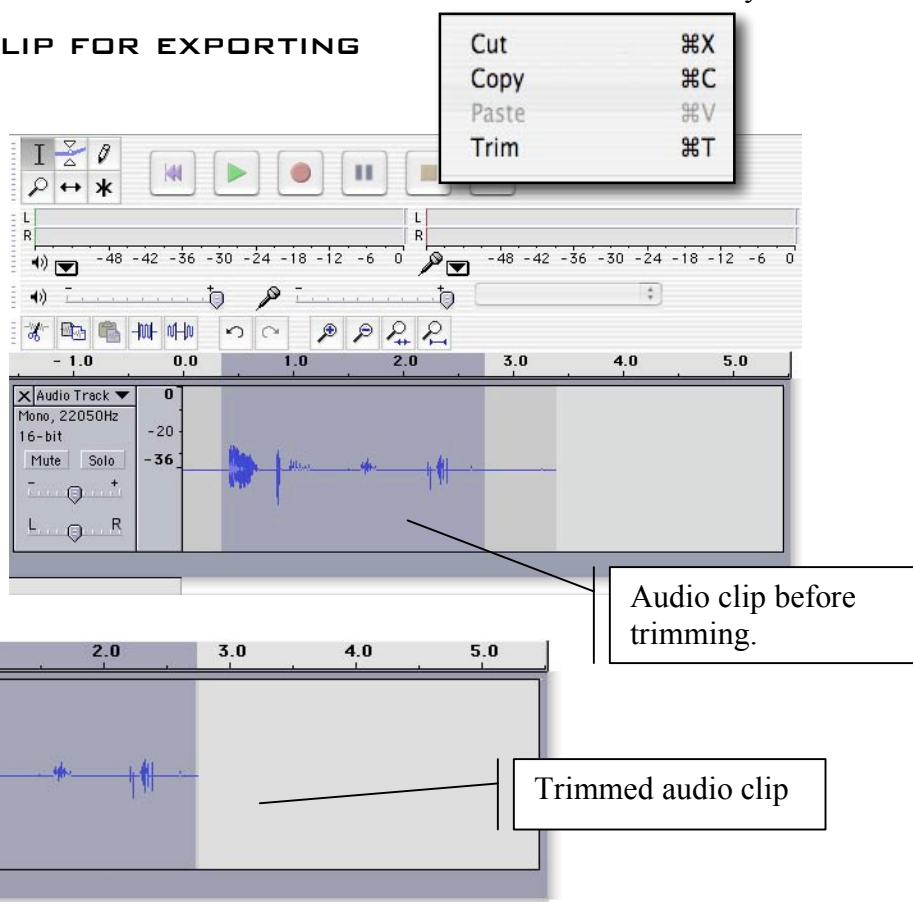
1. Record an audio clip following the instructions above. For example record the following words in this sequence, be sure to pause for a moment between each word: "ONE, TWO, FOUR, THREE, FIVE." Click the STOP button when you are finished.
2. To put the words in the correct order, listen to the clip and identify which of the words on the waveform is the word: "FOUR."
3. Select the word.
4. Choose **Cut** from the Edit menu.
5. Place the cursor after the word, "THREE."
6. Choose **Paste** from the Edit menu.

**EXPORTING AN MP3 FILE**

Audacity allows you to export your file in a number of audio formats, the most practical of which may currently be MP3 files which can be played on a personal computer, by some CD players, and on portable devices. MP3 files are significantly smaller than other non-compressed file types (e.g., the five-second sound file I created above exported as a WAV was 148KB, as an mp3 file it was only 28KB). The smaller file size of MP3 allows them to be easily shared via email or removable flash drives, or uploaded to a Web page.

PREPARING YOUR CLIP FOR EXPORTING

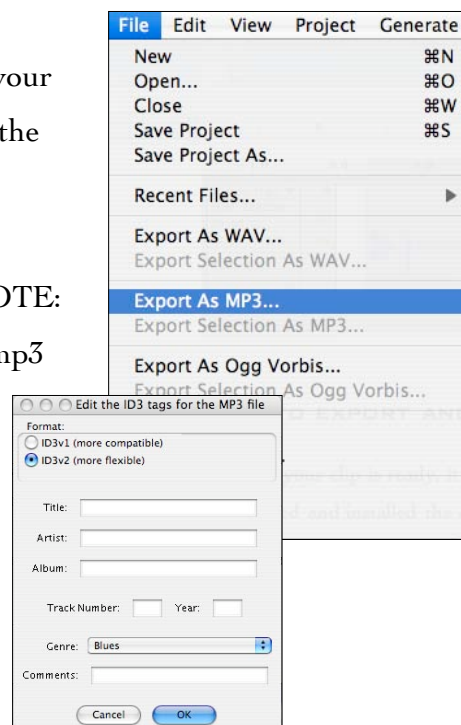
After you finish recording, you may want to “trim” extra space from your recording. One way to do this is to select the “good” part of the recording from start to end, then choose, “Trim” from the Edit menu.



HOW TO EXPORT AND MP3 FILE

Now that your clip is ready, it is fairly easy to export your MP3 file. Be sure you have downloaded and installed the appropriate LAME encoder (see above).

1. Choose **Export As MP3** from the File Menu.
2. Name your file and choose a location for it. NOTE: when you name your file, be sure to leave the mp3 extension at the end of the file name. For example myfile.mp3 OR timvanslyke.mp3
3. Click Save
4. You can ignore the “Edit the ID3 tags” dialog.



About Hardware:

The hardware required for creating digital audio files is become more inexpensive while simultaneously providing excellent quality. Your computer must have a sound card or audio capabilities. Nearly all computers purchased in the last five years do, so this shouldn't be an issue. You will also need a microphone and either speakers, or headphones to play back your recordings.

I highly recommend USB headsets (integrated headphones and microphone) over analog units (analog uses traditional audio plugs).